

STATE OF TENNESSEE TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION DIVISION OF WATER RESOURCES

William R. Snodgrass - Tennessee Tower 312 Rosa L. Parks Avenue, 11TH Floor Nashville, Tennessee 37243-1102

NOTICE OF DETERMINATION

Aquatic Resource Alteration Permit NRS21.161

CSX Transportation, Inc. 1590 Marietta Blvd NW Atlanta, GA 30318

This notice contains the final determination of the Tennessee Department of Environment and Conservation, Division of Water Resources (the Division) and responds to comments received on the application made by CSX Transportation, Inc. for the fill of 3.58 acres of wetland, temporary impacts to 1.25 acres of wetland, and temporary impacts to 120 feet of an unnamed tributary to Big Muddy Creek associated with replacement of three failing rail line bridges and construction of an access road in Stanton, Haywood County, Tennessee. To offset the losses of resource value resulting from the wetland fill, the applicant is required to purchase at least 7.16 wetland mitigation credits from the Hatchie Mitigation Bank.

CSX Transportation, Inc. submitted an application to the Division for a § 401 water quality certification and an Aquatic Resource Alteration Permit on June 21, 2021, with addenda submitted until August 27, 2021. The Division issued Public Notice for the proposed project on September 21, 2021. The Division has reviewed intergovernmental comments and comments from the public in response to the Public Notice. The following comments have been edited and summarized from their original form to organize the presentation of content. It has not been the Division's intent to omit or alter content.

1. Comment: The Division received a letter from the Tennessee Wildlife Resources Agency (TWRA) outlining water quality concerns related to the work proposed in the draft permit. Specifically, TWRA expressed concern about potential impacts to state-listed threatened species under their jurisdiction as a result of the project as proposed. The TWRA requested that no activities be performed from March through June to avoid impacts to the species in question and requested adherence to best management practices for erosion prevention and sediment control (BMPs). After the end of the Public Notice period, the applicant responded that they would adhere to BMPs, but disagreed that in-stream work restrictions between March and June would provide additional protection for the species in question considering the BMPs proposed and based on the location of the project site relative to suitable habitat. The Division forwarded this response to the TWRA for the opportunity to provide additional comment on the matter. The TWRA disagreed with the applicant's position and reiterated that their requests had not changed. The Division conveyed TWRA's response to the applicant and indicated that the Division intended to uphold TWRA's request. On November 19, 2021, the applicant notified the Division that they would not be supplying additional information regarding TWRA's concerns and to proceed with permit approval process.

Response: The Division appreciates the review provided by the TWRA and additional information supplied by the applicant.

In making a determination on the loss of resource values from existing conditions associated with the impact and the increase in resource values of any proposed mitigation, the Division considers factors such as the

diminishment of species composition in any stream and wetland, and whether the activity will adversely affect species formally listed in state lists of threatened or endangered species¹.

In addition, state law mandates that the Division lend whatever assistance is necessary to the TWRA in carrying out game and fish laws.² Where activities occur in known or likely known habitat of a species state-listed as threatened, endangered, deemed in need of management, or of special concern, coordination with the TWRA occurs during initial permit review or through the Public Notice commenting process to determine if any special conditions are required to avoid and/or minimize harm to the listed species or their habitat. In this instance, the Division recognizes the expertise of the TWRA's aquatic biologists related to the species in question and their assessment of conditions necessary to prevent potential harm to said species.

The Division has determined that the requested special condition is necessary in the final permit to prevent potential loss of resource value associated with harm to state-listed threatened species.

Comment: Opposition was presented from one landowner in the site vicinity during the Public Notice period. The request was for the applicant to install additional temporary culverts during the bridge replacement at CSX rail line milepost 329.6, citing concerns over inadequacy of the proposed culverts to convey flow down-gradient away from his property. After the end of the Public Notice period, the applicant responded with additional information on the proposed work. The applicant reiterated that the temporary culverts, crane pads, and laydown areas will be removed and returned to pre-construction contours once construction is complete. The applicant also indicated that the proposed temporary crane pads and temporary laydown areas are at a lower elevation than the low cord of the existing bridges, and that should a significant rainfall event occur and the culverts be overwhelmed, the additional water will overtop the temporary crane pads and laydown areas and continue down-gradient and off-site away from the landowner's property. The applicant also noted that per the project's National Pollutant Discharge Elimination System (NPDES) permit issued by the Division, temporary erosion prevention and sediment control measures should be designed for the 2-year, 24-hour design storm. The applicant also noted that per the Tennessee Erosion & Sediment Control Handbook, Fourth Edition, for temporary crossings of streams with large watersheds, the crossing may also be designed based on the low-flow channel conditions as a low water crossing, in which the culvert size would be adequate to convey base flows, but high-water events would overtop the structure and make the crossing temporarily unusable. The applicant also stated that they had completed an extensive hydrology and hydraulics (H&H) evaluation for the proposed new bridge structures that documents compliance with associated Federal Emergency Management Agency (FEMA) guidelines.

Response: The Division appreciates the comment from the private landowner, and the additional information supplied by the applicant.

Concern over the impact of the proposed project on stormwater quantity is noted, and the Division recognizes the larger need to consider the impacts of development on flooding at the watershed scale. However, please note that the ARAP program does not regulate stormwater quantity; rather, it is focused on stream and wetland impacts as they relate to water quality. To this end, the Division does routinely include conditions in ARAPs preventing impoundment of normal or base flows (flows not affected by rapid

¹ TDEC Rules, Chapter 0400-40-07-.04(6)(c)

² Tenn. Code Ann. 11-1-103: ("The several divisions located within the department of environment and conservation shall cooperate with the state wildlife resources agency, and the employees of the divisions shall lend whatever assistance is necessary to carry out the game and fish laws.")



runoff during or after rainfall events). Thus, the final permit will contain the following condition: "The stream and wetland crossings shall not impound normal or base flows on the upstream side, and not result in a disruption or barrier to the movement of fish or other aquatic life on the downstream side." Any non-adherence to these conditions would be considered a violation of the permit.

The Division has received reasonable assurance from the applicant that the design of the temporary and permanent structures will be sufficient to convey both base flows and elevated flows due to rapid runoff during and after rainfall events down-gradient.

Conclusion

For the foregoing reasons, and for the reasons set forth in the rationale for the permit, the Division has determined to issue ARAP NRS21.161 authorizing specified stream and wetland impacts for the replacement of three failing rail line bridges and construction of an associated access road.